



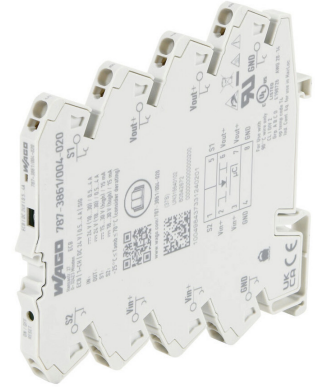
Single-Channel Electronic Circuit Breakers 787-3861 Series

Overview

WAGO's 24 VDC, single-channel ECBs improve operations and offer significant cost savings. The 787-3861 series has the ability to configure the S2 output on all variants and to report 7 different states including triggered or manually switched OFF along with early load warnings. All models have an easy to access reset button. Adjustable current models are easily programmed with discrete settings.

Features

- Space-saving 6mm wide one-channel ECB
- This series reliably removes power in the event of an overload or short circuit on the secondary side
- Two voltage inputs and two voltage outputs maximize commoning options and reduce wiring
- Switch the breaker ON or OFF via remote input, or a local switch
- Time-delayed activation during interconnected operation prevents overloads due to inrush current



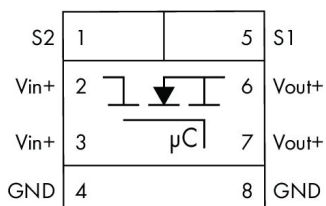
787-3861/004-020

Single-Channel Electronic Circuit Breakers 787-3861 Series Selection Chart

Part Number	Price	Quantity Per Pack	Amperage Rating	Voltage	Voltage Drop	Trip Time	NEC Class 2	Wiring	Weight grams	Drawing Link
787-3861/004-020	\$33.00	1	Adjustable 0.5-4A	18-30 VDC	≤40mV (0.5A) ≤80mV (1A) ≤120mV (1.5A) ≤160mV (2A) ≤200mV (2.5A) ≤240mV (3A) ≤280mV (3.5A) ≤20mV (4A)	10ms to 90s (load-dependent)	No	Diagram 1	55.7	PDF
787-3861/004-1020	\$33.00				Yes		Diagram 1	55.7	PDF	
787-3861/050-000	\$30.00		0.5A		≤40mV	4ms to 100s (load-dependent)	No	Diagram 1	55.6	PDF
787-3861/050-1000	\$30.00						Yes	Diagram 1	55.6	PDF
787-3861/100-000	\$30.00		1A		≤80mV		No	Diagram 1	55.6	PDF
787-3861/100-1000	\$30.00						Yes	Diagram 1	55.6	PDF
787-3861/108-020	\$33.00		Adjustable 1-8A		≤80mV (1A) ≤160mV (2A) ≤240mV (3A) ≤20mV (4A) ≤150mV (5A) ≤180mV (6A) ≤210mV (7A) ≤240mV (8A)	10ms to 90s (load-dependent)	No	Diagram 1	53.0	PDF
787-3861/200-000	\$30.00				2A		≤160mV	No	Diagram 1	55.6
787-3861/200-1000	\$30.00		Yes				Yes	Diagram 1	53.0	PDF
787-3861/400-000	\$30.00		4A		≤320mV	4ms to 100s (load-dependent)	No	Diagram 1	55.6	PDF
787-3861/400-1000	\$30.00						Yes	Diagram 1	53.0	PDF
787-3861/600-000	\$30.00		6A		≤180mV		No	Diagram 1	55.6	PDF
787-3861/800-000	\$30.00		8A		≤ 240 mV		No	Diagram 1	55.6	PDF

Wiring Diagram

Diagram 1





Single-Channel Electronic Circuit Breakers 787-3861 Series

Single-Channel Electronic Circuit Breakers 787-3861 Series Specifications

Nominal Input Voltage	24 VDC
Input Voltage Range	18-30 VDC
Total Number of Channels	1
Nominal Output Voltage	24VDC
Output Voltage Range	18-30 VDC
Switch-On Behavior	Time-delayed channel switching (load dependent, min. 0 ms/max. 500ms)
Current Limitation	No
Signaling	1 x Status LED (green/yellow/red) 1 x Signal output (18- 30 VDC, max.0.015 A), Default setting: triggered
Operation Status Indicator	Green LED (channel OK) Red LED (channel switched OFF)
Remote Input	1 x Control input (15-30 VDC) (active high); 0-5 VDC (active low); max. 0.015 A)
Isolation Voltage	DC 0.5 kV
Protection Type	IP20 (per EN 60529)
Reverse Voltage Protection	No
Transient Suppression	Suppressor diode (33V)
Series/Parallel Operation of Single Channels	Not permitted
Tightening Torque	N/A
Connectors	Push-In CAGE CLAMP®, Solid Conductor 26-14 AWG [0.08-2.5 mm ²], Stranded Conductor 22-14 AWG [0.34-2.5 mm ²]
Mounting	35mm DIN rail
Surrounding Air Temperature (Operation)	-25 to 70°C [-13 to 158°F]
Surrounding Air Temperature (Storage)	-40 to 85°C [-40 to 185°F]
Relative Humidity	10 to 95% (no condensation permissible)
Derating	No derating
Pollution Degree	2
Agency Approvals	cULus File E175199,, CE, UKCA

To obtain the most current agency approval information, see the Agency Approval Compliance & Certifications Checklist section on the specific part number's web page.

LED Operation

Explanation	Status LED
Initialization of the device (boot routine)	Off
Channel switched ON	Green
Channel switched ON Load current > 90% nominal current	Green flashing (1Hz)
Channel switched ON Load current > 100% nominal current (overload)	Green flashing (5Hz)
Channel switched OFF manually or through input S1	Red
Channel tripped - Wait for temperature to return to normal	Red flashing (1Hz)
Channel tripped - Temperature returned to normal Channel can be switched ON again	Yellow flashing
Channel tripped - Undervoltage	Red/Yellow flashing (1Hz)
Channel tripped - Overvoltage	Red/Yellow flashing (5Hz)
Device error, wiring error, feedback voltage	Red/Yellow/Green One after the other (1Hz)



Single-Channel Electronic Circuit Breakers 787-3861 Series

Overview

Distribution modules allow expansion of terminals from the 787-3861 series single-channel electronic circuit breakers. Models available for V_{out}, GND, or both. Can be used with WAGO push-in jumpers for easy installation.



787-3861/000-1000

Potential Distribution Modules

Part Number	Price	Quantity Per Pack	Amperage Rating	Channels	Operating Voltage	Mounting	Wiring	Weight grams	Drawing Link
787-3861/000-1000	\$10.00	1	20A	(8) 0 VDC	0 VDC	35mm DIN rail	Diagram 1	55.7	PDF
787-3861/000-2000	\$10.00		20A	(8) 24 VDC	24 VDC		Diagram 2	55.7	PDF
787-3861/000-3000	\$10.00		20A	(4) 0 VDC/(4) 24 VDC	0-24 VDC		Diagram 3	55.7	PDF

Wiring Diagrams

Diagram 1

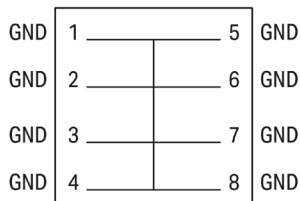


Diagram 2

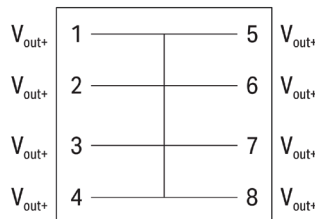
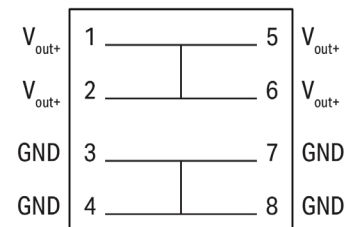


Diagram 3



Specifications

Limiting Continuous Current	20A; 15A (UL)
Protection Type	IP20 (per EN 60529)
Tightening Torque	N/A
Connectors	Push-In CAGE CLAMP®, Solid Conductor 26-14 AWG [0.08-2.5 mm²], Stranded Conductor 22-14 AWG [0.34-2.5 mm²]
Mounting	35mm DIN rail
Surrounding Air Temperature (Operation)	-25 to 70°C [-13 to 158°F]
Surrounding Air Temperature (Storage)	-40 to 85°C [-40 to 185°F]
Relative Humidity	10 to 95% (no condensation permissible)
Pollution Degree	2
Agency Approvals	cULus File E175199, CE, UKCA

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